REMARKS

Claims 1-14, 17-45, 47-59, 61-72, 74-81, 83, 85 and 87-92 are pending in the application.

Claims 1-14, 17-45, 47-59, 61-72, 74-81, 83, 85 and 87-92 have been rejected.

Claims **1, 9, 10, 36, 45, 55, 59, 68, 72, 81,** and **85** have been amended. Applicant respectfully submits that these amendments add no new matter as various support for these amendments can be found at least, for example, at Figure 5, page 22, ¶[0070] and ¶[0041] of Applicant's Specification as published by the USPTO.

Claims 15, 16, 46, 60, 73, 82, 84, 86 have previously been cancelled.

Rejection of Claims under 35 U.S.C. §101

Claims 1-14, 17-35, 36-45, 47-54 and 68-72 stand rejected under 35 U.S.C. §101 as being purportedly directed to non-statutory subject matter. Without conceding the propriety of these rejections, but instead to expedite prosecution, Applicant has chosen to amend Claims 1, 36, and 68. Applicant respectfully submits that these amendments overcome the rejections of Claims 1-14, 17-35, 36-45, 47-54 and 68-72 and respectfully requests withdrawal of the rejections of Claims 1-14, 17-35, 36-45, 47-54 and 68-72 under 35 U.S.C. § 101. Applicant further reserves the right to demonstrate, in a response to a subsequent office action or in a continuing application, that the previous versions of Claims 1-14, 17-35, 36-45, 47-54 and 68-72 are not directed to non-statutory subject matter.

Rejection of Claims under 35 U.S.C. §112

Claims 81, 83-85 and 87-92 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly being indefinite for purportedly failing to comply with the enablement requirement. Specifically, the Office Action alleges that "[t]he specification does not adequately describe the

structure that is used to provide the means for indicating duplicate packets. According to the

Specification, a PSV signal, not a structure, is used to indicate duplicate packets." Applicant

respectfully traverses this rejection. As an initial matter, the cited paragraph does not describe

the recited PSV as a signal. The cited paragraph states:

> [0035]   FIG. 1 is a block diagram illustrating the architecture of a network device 100 according to embodiments of the present invention. Network device 100 receives an incoming packet stream 105 at a packet processing unit 110. Once processed by packet processing unit 110, incoming packet stream 105 is forwarded by network device 100 as an outgoing packet stream 115. The packets of incoming packet stream 105 are processed within packet processing unit 110, in part, by a packet summary value (PSV) generator 120. PSV generator 120 generates a PSV 125, which is passed to a duplicate packet map (DPM) bank 130. DPM bank 130 is controlled by a DPM control unit 140. If DPM bank 130, in conjunction with DPM control unit 140, determines that the value presented as PSV 125 indicates a duplicate packet, this condition is communicated to packet processing unit 110 via a hit signal 145. Similarly, if the value presented as PSV 125 does not cause DPM bank 130 to generate a hit, the fact that the packet in question is not a duplicate is likewise indicated using hit signal 145. If the packet is not a duplicate, the entry corresponding to the value of PSV 125 (i.e., the packet in question) in DPM bank 130 is updated to indicate the packet's reception (for use in identifying duplicates of this packet, in the future). Once the determination as to whether or not the given packet is a duplicate has been made, packet processing unit 110 can then process the given packet appropriately, based on this information.

Specification, ¶[0035].   While a duplicate packet signal is described, Applicant does not

describe PSV 125 as a signal. PSV 125 is described as a value. Further, in ¶[0037], the nature

of the PSV is clarified as a set of bits (a structure, rather than a signal). *See* Specification,

¶[0037].   As it is clear from Applicant's Specification that the recited PSV is a value or a

structure and not a signal, Applicant respectfully submits that the rejection of Claims 81, 83-85

and 87-92 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the

enablement requirement is overcome. Applicant respectfully requests withdrawal of the rejection of Claims 83-85 and 87-92 under 35 U.S.C. § 112, first paragraph.

Claims 81, 83-85 and 87-92 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for purportedly failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses this rejection. As an initial matter, Applicant respectfully assert that the Office Action's rejections under § 112 are improper, because they relate to claim breadth, rather than indefiniteness. As will be appreciated, if the scope of the claimed subject matter can be determined by one having ordinary skill in the art, a rejection [which refers to indefiniteness] would not be appropriate. *See* MPEP 706.03(d). At page 4, the Office Action asserts that "[it] is not clear what is meant by a means for indicating duplicate packets." *See* Office Action, p.4. The Examiner's concern appears to be that terminology could read on a breadth of multiple embodiments. Breadth of a claim is not to be equated with indefiniteness. *See In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph. *See* MPEP 2173.04. More specifically, Applicant respectfully submits that questions as to what is meant by common words such as 'indicating duplicate packets', the meanings of which are clear and ascertainable to a person of ordinary skill in the art, go to breadth, rather than definiteness. Therefore, Applicants respectfully submit that Claim 1 is definite and request withdrawal of the Office Action's rejections under 35 U.S.C. § 112, second paragraph.

Further, as will be appreciated, in reviewing a claim for compliance with 35 U.S.C. § 112, second paragraph, the examiner must consider the claim <u>as a whole</u> to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice

function required by 35 U.S.C. § 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. *See, e.g., Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). Applicants respectfully submit that, considering the claim as a whole, the Office Action's question as to the meaning of "indicating duplicate packets" is answered in the following words of the claim limitation. Quoted in full, the claim recites the limitation, "means for indicating said packet is said duplicate packet, said means for indicating configured to indicate said packet is said duplicate packet if said means for determining determines said packet is said duplicate packet." Applicants respectfully submit that the claim language denotes a specifically discernable standard of causation, the fulfillment of which would be apparent to one of ordinary skill in the art. Applicant respectfully submit that "the requirement to 'distinctly' claim means that the claim must have a meaning discernible to one of ordinary skill in the art when construed according to correct principles....Only when a claim remains insolubly ambiguous without a discernible meaning after all reasonable attempts at construction must a court declare it indefinite." *See Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1366, 71 USPQ2d 1081, 1089 (Fed. Cir. 2004). Applicants respectfully submit that "means for indicating said packet is said duplicate packet, said means for indicating configured to indicate said packet is said duplicate packet if said means for determining determines said packet is said duplicate packet" has a readily discernable meaning, and Applicants respectfully request that the Examiner withdraw the Office Action's rejection of claim 1 for indefiniteness.

Rejection of Claims under 35 U.S.C. § 103(a)

Claims 1-14, 17-45, 47-59, 61-72, 74-81, 83, 85, 87-92 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over U.S. Patent No. 6,446,131 issued to Khansari, et

al. ("*Khansari*") in view of U.S. Publication No. 2004/0267945 by Reiss ("*Reiss*") and U.S.

Patent No. 6,381,660 issued to Ito ("*Ito*"). Applicant respectfully traverses this rejection. As

will be appreciated, in order for a claim to be rendered invalid under 35 U.S.C. §103, the subject

matter of the claim as a whole would have to be obvious to a person of ordinary skill in the art at

the time the invention was made. *See* 35 U.S.C. §103(a). This requires: (1) the reference(s)

must teach or suggest all of the claim limitations; (2) there must be some teaching, suggestion or

motivation to combine references either in the references themselves or in the knowledge of the

art; and (3) there must be a reasonable expectation of success. *See* MPEP 2143; MPEP 2143.03;

In re Rouffet, 149 F.3d 1350, 1355-56 (Fed. Cir. 1998).

Applicants respectfully submit that this burden has not been met by the instant Office

Action. Amended independent Claim 1, for example, recites:

A network device comprising:
    a duplicate packet map (DPM), wherein
        said DPM comprises a previous time interval field and a current time interval
            field;
    a packet summary value (PSV) generator, wherein
        said DPM is coupled to said PSV generator,
        said PSV generator is configured to, responsive to receiving a packet,
            extract data from said packet, and
            calculate a PSV using said data from said packet, and
        said DPM is configured to receive said PSV; and
    a DPM bank, wherein
        said DPM bank is configured to store a plurality of DPMs by virtue of comprising
            a plurality of memory cells, and
        said plurality of DPMs comprises said DPM.

See Claim 1. Applicants respectfully submit that the present Office Action does not establish a

prima facie case to support the rejection of Claim 1 as being rendered obvious by the

combination of *Khansari* with *Reiss* and *Ito*, because the combination of *Khansari* with *Reiss*

and *Ito* does not disclose certain of the recited elements of Claim 1 for which it is cited.

Application No.: 10/626,792

With respect to specific elements in this regard, Claim 1 now recites "a packet summary value (PSV) generator, wherein ... said PSV generator is configured to, responsive to receiving a packet, extract data from said packet, and calculate a PSV using said data from said packet." This limitation is supported by, for example, at least former Claim 9, former Claim 10, and ¶[0041]. With respect to previously-recited limitations related to the PSV generator, the Office Action states that the PSV generator is taught at Col. 7, lines 46-56 of *Khansari*. *See* Office Action, page 6. The cited text states:

> Each entry 64 of the hash table 58 indicates whether a new frame has already been received. A value of 0 could indicate that the new frame has not yet been received, while a non-zero value could indicate that the new frame has already been received. The CRC value of the FCS field 110 provides an index to the hash table 58. Thus, when the first bridge 18 receives a new frame and the new frame has an FCS value of m, the bridge looks at the m.sup.th entry 64 of the hash table 58. If the m.sup.th entry 64 is empty, the first bridge 12 learns that an identical frame has not yet been received. Then the m.sup.th entry is marked as received.

Khansari ¶[0069], lines 1-10. In interpreting this text, it is important to note that the Office Action maps the FCS value of *Khansari* to the recited PSV. *See* Office Action, page 5, line 16. Thus, *Khansari* appears to teach that the FCS, which the Office Action maps to the PSV, is directly extracted from the received frame. Direct extraction of the FCS (allegedly a PSV analog) from the frame stands in considerable contrast to the recited "responsive to receiving a packet, extract[ing] data from said packet, and calculat[ing] a PSV using said data from said packet." The FCS of *Khansari* is pulled directly from the frame and no calculation of the FCS on the receiving entity is taught or suggested, at least because no such calculation is needed. In fact, *Khansari*'s teaching of "receive and immediately compare" teaches away from the recited "a packet summary value (PSV) generator, wherein ... said PSV generator is configured to, responsive to receiving a packet, extract data from said packet, and calculate a PSV using said data from said packet" limitation. Even if, arguendo, the FCS is somehow equivalent to a PSV

Application No.: 10/626,792

(a notion that applicants respectfully traverse), the recited calculating is neither taught nor needed for a known value already having been calculated. For at least the reason that the alleged combination of *Khansari* with *Reiss* and *Ito* does not (and cannot) teach or suggest this limitation, the alleged combination of *Khansari* with *Reiss* and *Ito* does not teach or suggest all of the limitations of independent Claim 1.

Applicants therefore respectfully submit that Claim 1 is not obvious in view of the combination of *Khansari* with *Reiss* and *Ito*. Applicants therefore respectfully request that the Examiner withdraw the Office Action's rejection of Claim 1 under 35 U.S.C § 103. Further, as Claims 36, 55, 68 and 81 were rejected for the same reasons as Claim 1 (*see* Office Action, pg. 11), Applicants respectfully request the reconsideration and withdrawal of this rejection against each of Claims 1, 36, 55, 68 and 81. Each of the other rejected claims is dependent upon one of allowable base claims 1, 36, 55, 68 and 81, and Applicants respectfully request the reconsideration and withdrawal of the rejection against all remaining claims. Applicants further request that a Notice of Allowance be issued for all pending claims.

Additionally, with respect to Claims 9, 10, 45, 59, 72 and 85, the alleged combination of *Khansari* with *Reiss* and *Ito* does not teach or suggest the newly-included limitations. For example, Claim 85 is now amended to recite that "said means for generating said PSV further comprises means for calculating a cyclic redundancy check value based on said data in said packet, wherein the data from said packet excludes header and trailer information, and the data from said packet is path-independent." Applicants submit that these amendments to Claims 9, 10, 45, 59, 72 and 85 add no new matter. The alleged combination of *Khansari* with *Reiss* and *Ito* is incapable of teaching, and in fact teaches away from, these newly-amended limitations.
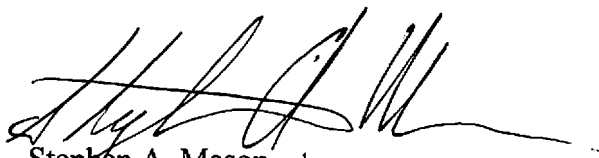
Specifically, as noted above, the Office Action maps the FCS of *Khansari*'s MAC frame as allegedly being the recited PSV. As is well known in the art, an FCS is trailer information in the MAC frame. Further, the FCS is path dependent, because it is calculated based, in part, on header information. *See* http://en.wikipedia.org/wiki/Frame_check_sequence. Thus, by mapping the recited PSV to the FCS of *Khansari*, the Office Action specifically excludes any interpretation of the combination of *Khansari* with *Reiss* and *Ito* that could possibly be reconciled with the recited "data from said packet excludes header and trailer information" limitation. The notion of calculating the PSV from "path independent" (by way of non-limiting example, payload) data is foreclosed by the mapping of *Khansari*'s FCS as purportedly corresponding to the recited PSV. For at least these reasons, the alleged combination of *Khansari* with *Reiss* and *Ito* does not teach or suggest the newly-included limitations of Claim 85 or of amended Claims 9, 10, 45, 59, 72, each of which includes either an exclusion of header and trailer information or path-independent limitation. Applicants therefore respectfully submit that Claims 9, 10, 45, 59, 72 and 85 are not obvious in view of the combination of *Khansari* with *Reiss* and *Ito*. Applicants respectfully request the reconsideration and withdrawal of the rejections against each of Claims 9, 10, 45, 59, 72 and 85 and that a Notice of Allowance be issued for all pending claims.

CONCLUSION

Applicants submit that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

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